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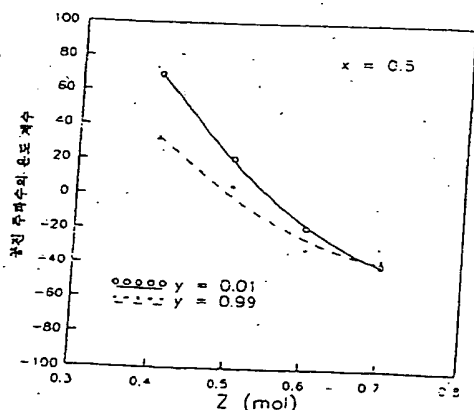
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(30) Priority:

(54) Title of Invention

DIELECTRIC COMPOSITION FOR HIGH-FREQUENCY WAVE

Representative drawing



(57) Abstract:

Dielectric ceramic composition for high-frequency wave is described which has high quality coefficient(Q value) and dielectric constant, and good temperature coefficient of resonance frequency. The dielectric ceramic composition may be represented as following formula:  $(1-z)(\text{Sr}_{1-y}\text{Ca}_y)\text{TiO}_3 - z\text{La}(\text{Zn}_{1-x/2}\text{Mg}_{x/2}\text{Ti}_{1/2})\text{O}_3$ , where, the range of x is from 0 to 1.0, the range of y is from 0.01 to 0.99 and the range of z is from 0.4 to 0.7. The dielectric composition according to the

invention has dielectric constant of 33.1 to 60.2,  $Q \times f_0$  (GHz) of 25,060 to 66,140, and the temperature coefficient of resonance frequency(TCF) ranging from -39.35 to 83.60 ppm/deg. C, which TCF being able to be controlled at a range of  $\pm 10$  ppm/deg. C depending on amount of addition of impurities, so that the ceramic composition may effectively be used in telecommunication system.

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(54) 고주파용 유전체 조성물

요약

[목적][구성] 1. 높은 품질 계수(Q값)의 유전율을 가지며 또한 공진 주파수의 온도 계수가양호한 것을 특징으로 하는 고

주파용 유전체 조성물